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RECENT TRENDS IN LABOR PRODUCTIVITY: UTAH AND THE NATION

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Very interesting aspects of the structure and performance of the Utah economy are illuminated by the Gross State Product (GSP estimates[1] released by the Bureau of Economic Analysis of the U.S. Department of Commerce. These data are allocations to individual states of the industry-by-industry estimates of gross national product. In broad terms, Utah's measured real (not just dollar value) economic activity had expanded by 1986 to more than 180 percent of its average size in years 1969 through 1973. This is an annualized average growth rate of 4.3 percent and is considerably higher than the 2.5 percent averaged by the nation. The number of Utah workers also expanded but at a lower average rate of 3.7 percent per year. The possibility explored in these pages is not just that real output per worker was increasing in Utah but that it was expanding substantially faster in Utah than in the nation.

The industry-by-industry detail further indicates that in many of Utah's basic sectors, the recent trends in average product per worker have been phenomenally high. Over the 1979-1986 period, average real output per Utah coal miner increased at an average rate of 7.6 percent per year. The same year saw worker productivity in "Chemicals" increase at an annualized rate of 9.0 percent. "Petroleum and Coal Product" productivity grew at a rate of 12.5 percent per year while productivity in "Non-Electrical Machinery" grew at 14.3 percent per year.

The GSP estimates do provide a useful and interesting basis for analysis. But, unfortunately, the data do not have uniformly high levels of accuracy. There are serious limitations on quality arising both from the nature of accounting conventions and the non-availability of information when these measures are disaggregated to the detail of states and industries. But, used carefully, very interesting and useful indicators of trends, conditions, and especially, differences in trends among states and regions can be provided.

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[1] The character and magnitudes of these estimates were closely described by Senior Research Economist, Boyd L. Fjeldsted, in the Utah Economic and Business Review for July-August, 1988.

Trends in Gross Product: Utah and the U.S.

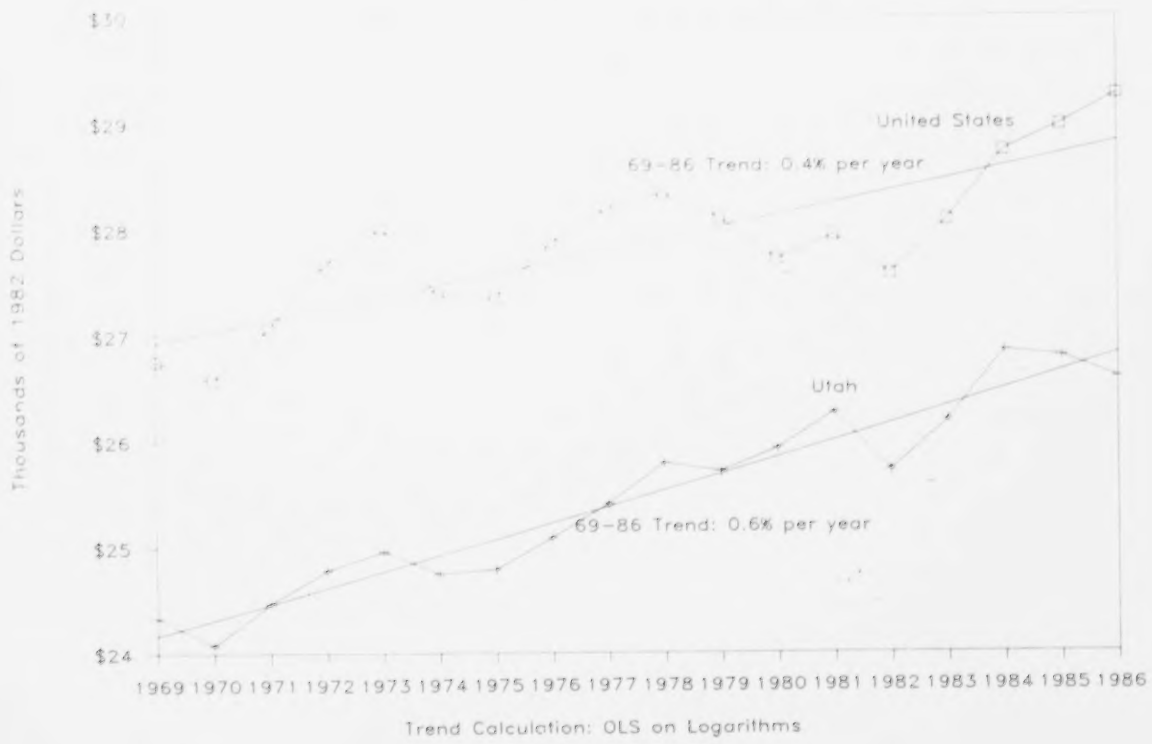
The broadly-encompassing measure, Gross State Product (GSP), does not conveniently afford a direct comparison between Utah and the United States, as Utah's 1986 GSP of $21.193 billion accounts for something less than one out of every $170 of economic production in the United States. Still, the local and national patterns of change in economic production can be compared by expressing the level of production for any year against the level of output for a base period. Values which accomplish this are presented in Table 1. Chart 1 thus shows the annual level of production for both Utah and the United States against their own average production levels, experienced over the 1969 through 1973 period, and also presents the calculated trend or average rate of change over the years 1969 through 1986.

Again, great accuracy should not be imputed to these numbers. Even if the year-by-year dollar values of production in an industrial sector, coal mining for example, were known with absolute precision, there is still a major step to take in deflating the dollar value of production by an appropriate price index to obtain the index of physical output. State-specific price indexes by industry are not generally available so the BEA deflated the dollar value of Utah coal production by the national price index for coal, regardless of the fact that Utah's mix of coal production, strip and underground, metallurgical and steam, is not at all typical of the national mix. However, a lack of great accuracy does not imply that useful generalizations cannot be drawn.

An important feature of Chart 1 is the expansion in Utah's Gross State Product by 1986 to more than 180 percent of its average size over the 1969-73 period. During the same interval the U.S. economy grew by less than 50 percent. The rate of growth in Utah's Real GSP averaged 4.3 percent per year, which is well above the trend of 2.5 percent per year for the nation as a whole. It is not plausible that the much higher real growth rate for Utah is a consequence of errors in estimation and in imputations. Furthermore, the series for total employment displayed in Chart 2 are consistent with a higher rate of growth in Utah. By 1986, Utah's total employment had reached about 170 percent of its average level of the years 1969-1973. The expansion in the nation's employment was only by about 40 percent, and the average national employment growth rate of 2.1 percent per year is less than 60 percent of Utah's trend of 3.7 percent per year.

A most interesting difference is suggested by these comparisons: not only did real output increase at higher rates than total employment for both Utah and the nation, but the difference between the trends in real output and total employment is greater in Utah than in

Chart 1
Trends in Real Gross Product per Worker



Trend Calculation: OLS on Logarithms

the nation. That is, real output per worker appears to have been increasing faster in Utah than in the nation. How confidently this possibility can be held is the concern of this article.

Problems with Price and Mix When Comparing Real Output Levels

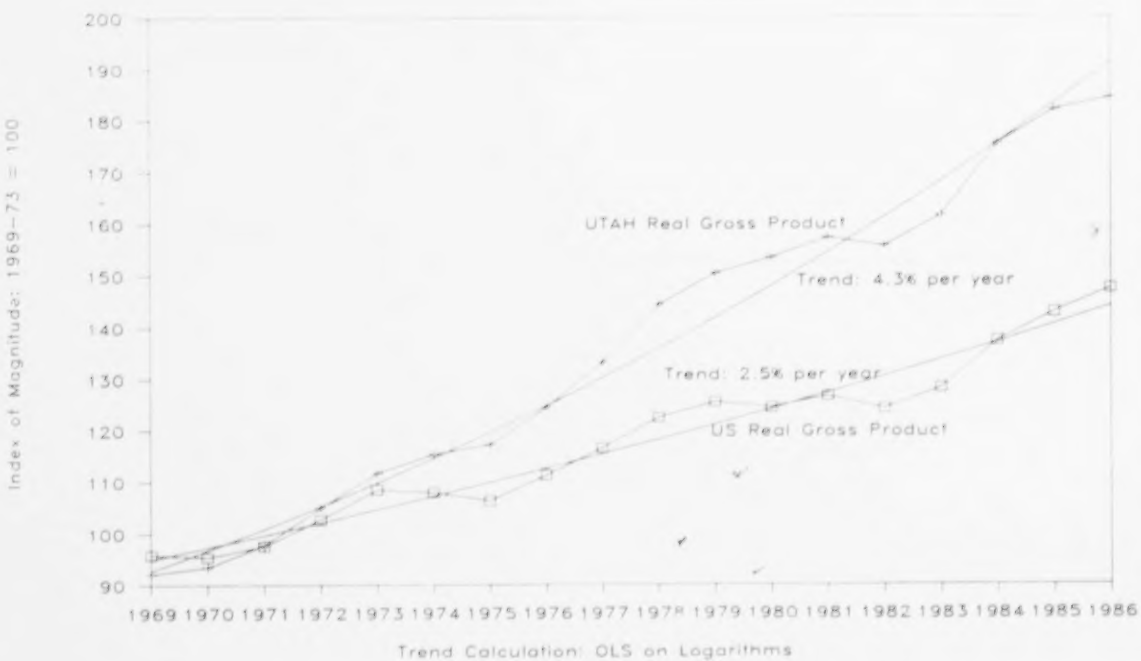
"Increasing at a higher rate" does not imply "is higher". The graphs in Chart 3 show for 1986, that Utah's Gross State Product was 26.6 thousand 1982 dollars per employed person while the nation's GNP was 29.3 thousand 1982 dollars per worker. The ratio of the two values describes the value added by economic activity per worker in the Utah economy in 1986 as being 90.9 percent of gross production per worker in the nation as a whole. This measure of relative productivity not only is less than 100 percent, it was down considerably from levels that had been consistently running at more than 93 percent throughout the earlier years of the 1980's.

The decrease in Utah's relative productivity between 1984 and 1986 was partly due to the sharp decline in employment in Utah's metal mining and primary metal manufacturing industries. Average productivities for Utah workers in these industries are much higher than the average of all Utah industries and actually are higher than the average productivities of these industries in the nation as a whole. Hence, Utah's relative productivity declined sharply when the combined employment in metal mining and metal manufacturing between 1984 and 1986 fell by 13.1 percent nationally, but dropped by 45.8 percent in Utah.

With the expectation that the extreme fall in share of Utah's metal mining and primary metal manufacturing was temporary, post-1986 data will exhibit a rebound in Utah's economy-wide average product. Still, two obvious actualities and a third, not-so-obvious actuality are apparent. Not only 1) is Utah's economy-wide productivity apparently somewhat lower than the nation's; and 2) clearly dependent upon the composition across industries of economic activity in Utah; but 3) average productivity in Utah is below the nation's, in spite of, rather than because of, the differences in composition between the two economies.

If a weighted average is taken of the sector-by-sector average product per worker for the 56 sectors into which the Utah economy was distributed, but with the weights being those of the distribution of national employment, the 1984 constant dollar Utah gross product per worker is reduced to $26,623 from the estimated $26,846. This is a small decrease of less than 1 percent and much smaller than the adjustment a similar process produces for Utah's average earnings per worker. Total earnings in 1984 for Utah's 751,591 workers and proprietors averaged out to $17,004 per

Chart 2
Trends in Real Gross Product



worker. Weighting the sector-specific Utah earnings by the national composition of employment diminishes the per worker earnings by nearly $700 to $16,309, for a reduction of over 4 percent.

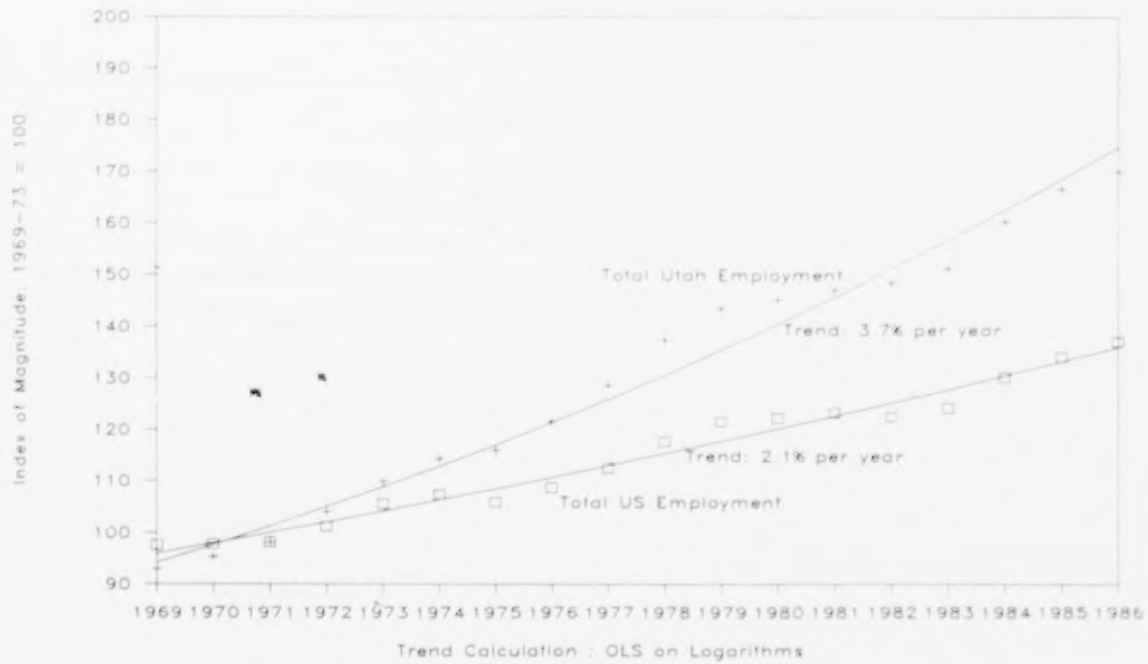
Average earnings appear to be more sensitive to differences in structure than are gross products. This suggests that allowances for capital charges and indirect business taxes vary less across regions than do wage rates. However, a specific finding is that Utah's relatively low wages and less than national average worker productivity are not a consequence of Utah's workers being relatively concentrated in low wage sectors. Instead, it is a reflection of Utah labor market conditions yielding less than national wage rates.

Additional support is available for the view that it is not the structure of the Utah economy that produces the low average wage. If the average wage for the United States is derived by giving the U.S. economy the composition of the Utah economy, earnings per worker for the U.S. in 1984 would increase from the actual $18,813 by more than $200 to $19,022 per worker. The implication is that workers in the Utah economy are relatively concentrated in higher wage sectors whether the wages are measured in Utah in the nation at large.

Lower Wages — Reflecting Relatively Good or Relatively Bad Conditions?

Economic considerations suggest that prices are lower when supply is relatively large compared to demand. But, there are both positive and negative possibilities in markets with low wages. A negative sense for Utah would be a relatively abundant supply of impaired labor with low employability elsewhere, a slowing expanding demand, and high worker relocation costs. A positive implication is of Utah being a state with a large endowment of amenities and lack of congestion and thus labor markets do not show it being necessary to persuade workers to stay with the inducement of high wages. It would be a matter for further research to come to a formal judgement as to whether the Utah labor market conditions reflect, on balance, a negative or a positive condition for a typical worker. What does matter at this point is the very real possibility that the seemingly low average products of Utah workers are not a cause of low wages, but rather that Utah's high levels of well-being with lower wages produces an estimate of low worker productivity because of the manner in which the estimates are generated.

Chart 3
Trends in Total Employment



The problem is not found in the estimation of the monetary value of State Gross Product. The current dollar or "nominal" estimates for value added in the farming, mining, construction, and manufacturing industries have their foundation in direct estimates obtained in the quinquennial economic censuses. The estimates of values added in the remaining industrial sectors are built up from the individually estimated components of gross state product: employee compensation, proprietor's income, capital charges, and indirect business taxes. There are numerous opportunities in both data quality and accounting convention for estimation errors to arise, but no obvious reason to suspect a systematic distortion of Utah's estimated value added compared to the estimates for other states. Unfortunately, plausibly acceptable estimates of current dollar gross state product do not necessarily imply adequate indexes of state-by-state constant dollar or "real" gross product.

The problem is deeper than even the very serious reservations that have been expressed over the quality of the price deflators used for some sectors. For example, Martin Neil Baily and Robert J. Gordon have suggested[2] that inappropriate price index conventions may even perversely indicate declining productivity in construction and several financial and service sectors while possibly national productivities in these sectors were actually increasing.

For an interest in comparisons across states of output per worker, it must be recognized that, in addition to any other index number problems, the deflation to 1982 dollars for an index of "real" gross output was performed, sector by sector, for every state by applying the national implicit price deflator for the individual sector. The consequence is quite direct. To the extent that the mix of industrial output within a sector in Utah differed in 1982 from the national mix, or **that the average 1982 price of product in Utah differed from the national sector price** even if the mix was the same, then the comparison of units of real output could differ materially from the measure of output in 1982 dollars.

This is a major limitation on the extent of application of the constant dollar state gross product series. It is entirely possible that the rate of change over time in the average physical product of Utah labor is well measured both absolutely and in comparison to the nation's, but that the difference in absolute level of average product between the state and the nation is badly distorted. Simply put, and without getting into the deeper problem of comparing apples and oranges, Utah's 1982 production of $25,724 worth of lower priced "apples" per worker may be more apples per worker that are represented by the nation's $27,576 worth of higher priced apples. This is likely to be the case to the extent that Utah's lower wage rates are reflected in lower prices for the regional production. The fact is that the constant dollar, state gross product estimates can be used to compare regions as to the rates of change in average product, but should **not** be employed in the comparison among regions as to their **absolute levels of output per worker** when product prices or intra-sector output mixes differ.

[2] Baily, Martin Neil and Robert J. Gordon "The Productivity Slowdown, Measurement Issues, and the Explosion of Computer Power" in Brookings Paper on Economic Activity, 2:1988, The Brookings Institution, Washington, D.C.

Selected Utah Sectors with High Rates of Increase in Productivity

Even given the qualification that little confidence can be placed in apparent differences in absolute levels of output per worker, the rates of change over time in output per worker are quite reliably measured. When this is done, industry by industry, some sectors display trends of an exceedingly interesting character. Viewing the regression-produced trend lines drawn on the fields of data points imparts an awareness of the year-to-year variation in calculated productivity and a sense of the often present sensitivity of estimated growth rate to accidents of inclusion or exclusion of end points. The 1979 was uniformly chosen for the start of the time interval for growth rate calculations as it typically appeared to be appropriate. However, there was no theoretical justification for it being the best year for this purpose and some sectors could well be recalculated with different groupings of years and with better descriptions of their patterns of change.

Even with the numerous caveats, the graphs of productivity trends reveal an amazing picture. In many of Utah's basic industries, the recent trends in average product per worker have been phenomenally high. A widely-held opinion has it that worker productivity in the United States has been languishing. While that can be argued to be the case in some sectors, these often are tertiary sectors with extraordinarily difficult measurement problems, some of which are beset by inappropriate accounting conventions on output evaluation. What is clear from these data is that much of the primary industry of the state and the nation has displayed, well beyond any reasonable doubt, high rates of increase in average annual worker productivity that in fact run counter to some commonly-held opinions. Additional charts for the industries of rapid productivity increase appear on page 13.

Table 1

Gross Product Estimates by Sector in Constant (1982) Dollars

Part 1: Estimates for the United States

(millions)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total Gross Product	2395442	2384793	2437585	2567321	2713214	2697238	2658600	2783318	2913337	3062866	3137538	3111256	3166388	3104127	3205302	3433083	3568628	3681144
Total as an Index (1969 — 73 = 100)	**95.83**	**95.40**	**97.52**	**102.71**	**108.54**	**107.90**	**106.34**	**111.35**	**116.55**	**122.53**	**125.52**	**124.46**	**126.67**	**124.18**	**128.23**	**137.34**	**142.76**	**147.27**
Gross Product by Sector																		
Farms	57227	60670	62340	62019	61060	60725	64817	62489	62206	61017	64585	64164	75709	76975	61345	68465	78945	84708
Ag. Services, Forestry, and Fisheries	8040	8178	8279	8835	9239	9024	8292	9011	9428	10791	11536	11990	12280	12621	13126	13757	14640	15675
Metal Mining	3751	3962	3625	3586	3639	3618	3421	3878	3393	3396	3616	3544	3802	2721	2165	2528	2409	2432
Coal Mining	10409	11150	10243	10953	10848	11029	11860	12328	12630	12117	14081	14942	14836	15108	14232	16090	16090	15652
Oil and Gas Extraction	110669	115188	114306	115409	114086	110779	105709	103394	105268	108023	106921	111661	115519	110228	104065	108905	106480	94686
Nonmetallic Minerals, except Fuels	4112	4248	4206	4461	4786	4867	4492	4755	4907	5287	5412	5487	5608	4465	4329	5447	5599	5322
Construction	183580	167964	162744	166659	170363	162290	149436	158095	165084	176693	173548	161641	147382	140908	147349	159218	164188	168262
Lumber and Wood Products	14458	14722	15160	17211	17808	17592	16438	18234	18917	19319	20991	20436	19881	16041	18116	20396	20469	21604
Furniture and Fixtures	8152	7511	7382	8064	8677	8867	7769	8917	9807	11028	10859	10225	10067	9537	10388	11782	11554	11359
Stone, Clay, and Glass Products	18460	17704	18000	19766	21951	20614	18660	20856	21153	23194	23329	21078	19771	18160	19687	21595	22166	22169
Primary Metal Industries	51308	46802	45558	48693	57825	58763	44015	46027	46103	50463	49752	46373	48166	36281	30014	34690	34085	35034
Fabricated Metal Products	48221	44129	42283	46777	52053	47465	41773	47063	50338	52516	54926	52471	52189	46281	48948	55835	55769	54765
Machinery, except Electrical	57006	57045	53154	60435	68684	70326	64065	68324	73308	79168	83785	84556	88557	80009	86304	114845	137452	150767
Electric and Electronic Equipment	37279	34403	34464	38328	43905	43967	37605	41499	49548	56555	60227	62669	64296	61814	66237	77336	83835	84975
Motor Vehicles and Equipment	35875	26534	35540	38370	44561	36517	33707	44383	52330	54585	47940	33710	33949	29453	38460	47876	47711	44476
Transport Equip. Excl. Motor Vehicles	39086	34301	31068	32400	33576	35447	33756	32044	32332	35662	37230	38104	33250	32228	38578	42607	45357	48542
Instruments and Related Products	13991	12268	12446	13955	15348	16219	16122	16978	18983	20432	22490	21795	23681	22631	23150	25376	28288	29697
Miscellaneous Manufacturing Industries	10214	9891	10395	11569	11606	10774	11333	12443	13340	12997	12953	10091	12124	11081	9913	14502	14755	14348
Food and Kindred Products	43250	43837	45454	48292	52177	47086	48196	51239	51218	51957	54884	56675	58170	61427	61996	60810	62875	62553
Tobacco Manufactures	8177	8675	8880	9118	9516	9621	9967	9939	9555	9931	9850	9524	9869	8916	8932	8670	7281	6994
Textile Mill Products	10982	11603	12022	12863	12643	11323	10636	12991	15783	15492	16071	16071	15781	14827	16636	16723	15761	16931
Apparel and Other Textile Products	15003	13995	14165	16583	17895	16890	16738	18008	18644	19556	19609	20062	20251	18931	19795	20350	19576	19483
Paper and Allied Products	20071	18756	19698	21874	25089	23795	20197	24007	26093	27554	27063	24628	24561	26718	28746	30215	30616	31256
Printing and Publishing	31583	29850	30073	31598	33635	32524	32448	33403	34972	36852	37542	36904	38333	38364	39863	41265	42565	42314
Chemicals and Allied Products	33824	34368	36444	39786	44594	42284	39274	45807	50547	52474	56363	50083	53464	55257	59641	59992	56435	59438
Petroleum and Coal Products	20699	23841	25204	24474	25740	25107	25131	26982	28930	29149	28881	26738	25521	24352	23962	25010	24888	26398
Rubber and Misc. Plastic Products	14285	12728	13765	15715	18168	16848	15236	15846	18419	19673	19983	18877	20854	19283	21716	24270	25153	26037
Leather and Leather Products	4735	4305	4307	4443	4808	4626	4425	4945	4708	4896	4275	4313	4386	4061	3794	3783	3709	3017
Railroad Transportation	30093	28835	25884	26139	27305	27989	25570	26972	26939	27766	27844	27232	24773	19033	19075	20156	19801	19721
Local and Interurban Passenger Transit	8438	8115	8115	8282	7617	7048	7192	7401	7497	7623	7725	7024	6652	5993	5813	6089	6317	6335
Trucking and Warehousing	36795	36610	39232	44400	48729	48832	44115	48746	53518	57269	56576	51543	49000	46590	48557	53377	52404	54196
Water Transportation	6041	6570	6324	6495	7314	7284	6785	7492	7574	8236	8310	8251	8206	7440	7492	7812	7790	7752
Transportation by Air	15125	14897	15163	16550	17595	18488	17519	18906	20274	22345	24929	23067	20521	19001	19647	22136	23694	25727
Pipelines, except Natural Gas	3591	3764	3878	4155	4431	4416	4431	4495	4767	5113	5311	5133	4925	4940	4856	4960	4930	5128
Transportation Services	4122	4013	3749	4347	4603	4812	4921	5177	5674	6543	6970	7226	7514	7762	8298	9167	10029	10347
Communication	37412	40919	43031	47048	50516	52966	55224	58149	61855	67698	72463	78432	82832	85633	92070	92888	94268	95257
Electric, Gas, and Sanitary Services	58645	60181	64418	66383	74881	76939	80615	79805	80363	82239	83275	85493	91802	92049	95035	103769	105773	103882
Wholesale Trade	149000	151982	161198	175044	181434	180965	185599	191647	204093	214269	217329	213501	218356	219004	222021	250606	268856	282441
Retail Trade	212735	215610	224522	239758	255570	245220	247520	262757	275118	288055	294380	286905	288917	287480	307029	328302	343251	362225
Banking and Credit Agencies	39578	41596	42656	44178	46800	49519	50459	51476	53460	56156	59266	61904	64280	65248	66442	67614	68972	70752
All Other Invest. Insur. & Real Estate	274461	279112	293218	306745	320874	332101	337148	351660	364219	386294	399947	402424	409885	409891	422529	439030	454611	480566
Hotels and Other Lodging Places	16407	17057	16256	18184	19138	19030	19203	20374	21175	22216	23126	22649	22259	21674	22519	22888	23235	22931
Personal Services	23273	22899	22465	22972	22739	21982	21059	21690	22374	22893	22297	22231	21026	21279	21800	22431	24619	25582
Business Services	46362	47541	47541	51261	55979	58792	57068	60425	65052	71675	78752	84014	88460	90728	99982	110960	120668	129832
Auto Repair, Services, and Garages	14937	14895	16040	17405	19412	19429	19166	20598	22247	24397	25011	24427	24543	23523	25156	27347	29156	30082
Miscellaneous Repair Services	5866	5885	5933	6307	6547	7313	7428	7505	7946	8224	8933	8837	9662	9585	9738	10198	10333	10160
Motion Pictures	4324	4834	4712	4817	5299	4910	5191	5838	6139	7301	6090	5689	5788	6266	6192	6303	6725	6921
Amusement and Recreation Services	8994	9176	9350	9688	10811	11010	11332	12113	12993	13135	13630	13727	14692	15079	16121	16441	18010	18228
Health Services	73418	77820	83074	88044	94293	97985	103523	108351	114600	119002	123546	129368	137747	142007	146693	153084	158906	166006
Legal Services	21742	23209	23638	23699	24983	25472	24738	25533	26359	28805	28561	28867	30640	30579	31649	32781	35044	38878
Educational Services	14090	14606	15314	15639	15925	16480	16786	16824	16786	17168	17550	18105	18621	19118	19825	20628	21183	21355
Social Services, Membership, & Misc.	46236	46458	47298	51476	54913	56321	58712	59994	64042	68579	74433	77287	81726	76199	78790	82155	84628	87917
Private Households	12101	11319	10814	10487	10160	8777	8186	8449	8660	8466	7826	7381	7326	7596	8126	8811	8817	9024
Federal Civilian Government	85158	82139	80432	77315	75366	77550	77829	80272	81420	83982	83675	83733	82686	80085	82159	84023	86152	86117
Federal Military Government	52719	49954	47917	45745	45572	45345	43622	41809	41582	41344	41034	42748	44935	46667	47760	47102	47803	48865
State and Local Government	179322	186671	194210	201612	209128	216346	221641	224325	228667	235316	241977	245196	247357	246404	247191	249687	254002	258023

Table 1 (continued)

Part 2: Estimates for the State of Utah

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total Gross Product	10599	10752	11242	12083	12850	13267	13485	14315	15324	16611	17231	17639	18093	17892	18570	20177	20920	21193
Total as an Index (1969 — 73 = 100)	**92.13**	**93.44**	**97.72**	**105.03**	**111.69**	**115.32**	**117.19**	**124.43**	**133.2**	**144.38**	**150.29**	**153.32**	**157.26**	**155.52**	**161.41**	**175.38**	**181.84**	**184.21**
Gross Product by Sector																		
Farms	262	287	288	278	254	235	223	247	235	232	281	314	307	340	312	298	333	387
Ag. Services, Forestry, and Fisheries	19	19	20	23	23	23	22	25	28	31	33	35	39	42	44	50	53	48
Metal Mining	326	323	318	301	238	254	241	263	247	247	293	285	306	170	194	183	106	103
Coal Mining	90	82	75	79	98	103	134	186	201	191	254	287	306	345	254	247	267	276
Oil and Gas Extraction	402	396	396	483	605	648	574	488	583	601	526	566	623	482	416	483	410	284
Nonmetallic Minerals, except Fuels	37	32	25	25	26	30	33	40	43	42	44	48	55	46	45	45	49	48
Construction	729	705	767	925	976	964	974	1171	1305	1341	1308	1135	982	945	1018	1176	1154	1037
Lumber and Wood Products	27	28	32	41	45	46	63	69	74	79	81	79	73	58	64	76	76	71
Furniture and Fixtures	9	11	15	19	21	21	17	21	23	31	34	35	36	36	47	56	59	55
Stone, Clay, and Glass Products	82	78	92	108	124	119	111	129	134	152	163	141	126	117	130	164	171	167
Primary Metal Industries	476	427	403	441	476	475	342	325	300	318	320	332	330	294	231	264	248	195
Fabricated Metal Products	116	109	107	121	148	138	158	177	181	193	197	202	207	187	181	220	202	186
Machinery, except Electrical	124	145	186	211	244	261	271	301	322	354	397	451	547	578	696	937	1158	1311
Electric and Electronic Equipment	60	52	35	44	51	47	59	65	83	112	145	188	202	205	211	267	257	264
Motor Vehicles and Equipment	15	12	15	20	23	25	29	40	45	58	55	34	41	43	55	77	73	68
Transport Equip. Excl. Motor Vehicles	172	187	204	226	232	263	213	183	191	219	256	294	287	293	373	467	551	586
Instruments and Related Products	14	14	14	15	22	35	33	47	64	69	88	86	80	76	85	97	114	127
Miscellaneous Manufacturing Industries	15	17	22	28	31	31	28	33	36	42	43	38	43	40	35	54	63	61
Food and Kindred Products	143	148	146	159	169	158	165	176	179	182	193	196	207	223	218	219	239	248
Tobacco Manufactures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Textile Mill Products	1	1	1	1	1	1	1	2	2	2	2	1	1	1	2	3	2	2
Apparel and Other Textile Products	33	34	34	40	46	52	54	65	67	79	80	78	81	78	83	82	77	76
Paper and Allied Products	12	11	13	17	19	18	16	15	16	18	19	18	19	21	23	27	43	50
Printing and Publishing	75	74	71	76	88	95	102	112	122	140	152	157	168	175	183	199	208	205
Chemicals and Allied Products	25	29	37	47	56	52	57	61	82	103	123	128	156	173	180	199	186	188
Petroleum and Coal Products	95	124	149	134	172	110	131	150	149	157	164	145	164	167	195	230	246	258
Rubber and Misc. Plastic Products	14	12	11	12	18	22	25	28	39	38	40	42	42	32	31	37	42	48
Leather and Leather Products	1	1	2	2	2	2	1	2	3	3	2	1	3	2	1	1	1	1
Railroad Transportation	280	267	243	246	244	243	211	204	190	212	238	247	241	212	222	245	253	252
Local and Interurban Passenger Transit	32	31	31	31	29	29	30	36	43	47	51	49	45	20	19	18	18	19
Trucking and Warehousing	221	229	265	309	334	341	327	370	402	425	427	392	363	338	328	360	348	356
Water Transportation	0	0	0	0	0	0	1	2	2	2	3	3	3	3	4	0	0	0
Transportation by Air	46	47	48	58	58	64	60	71	68	88	84	86	85	115	169	183	177	197
Pipelines, except Natural Gas	18	21	21	22	27	34	28	27	27	46	63	79	87	99	82	87	90	94
Transportation Services	12	11	11	14	15	16	17	20	22	25	23	20	23	26	28	33	38	40
Communication	171	182	191	205	236	258	281	300	324	356	388	426	462	471	516	515	534	497
Electric, Gas, and Sanitary Services	264	267	295	310	354	390	459	474	501	576	630	747	909	978	1058	1117	1095	1080
Wholesale Trade	686	705	750	829	883	904	934	971	1052	1157	1191	1189	1228	1221	1239	1354	1460	1511
Retail Trade	959	979	1053	1177	1291	1278	1328	1461	1563	1671	1704	1650	1673	1680	1800	1961	2051	2132
Banking and Credit Agencies	184	189	186	189	198	216	213	221	227	260	283	287	307	319	338	359	350	355
All Other Invest. Insur. & Real Estate	1040	1089	1174	1321	1389	1575	1713	1768	1885	2182	2280	2371	2233	2249	2288	2371	2451	2507
Hotels and Other Lodging Places	61	68	70	82	78	80	106	113	121	132	140	136	129	144	143	162	136	133
Personal Services	90	91	92	96	95	97	98	104	110	114	114	113	103	108	109	117	130	132
Business Services	117	130	139	154	172	195	203	222	251	279	309	339	359	357	399	463	515	547
Auto Repair, Services, and Garages	80	78	85	96	114	115	115	127	141	155	165	168	167	164	172	192	202	200
Miscellaneous Repair Services	32	32	33	43	45	51	50	53	60	63	68	68	74	80	73	74	77	71
Motion Pictures	24	20	24	25	22	20	26	31	39	70	39	28	25	27	27	38	39	45
Amusement and Recreation Services	36	38	47	53	62	57	52	57	61	63	67	66	70	71	74	85	99	95
Health Services	308	322	348	360	383	405	439	472	527	539	575	626	680	702	697	725	766	821
Legal Services	66	72	71	73	79	89	93	100	107	108	103	103	120	124	127	128	135	141
Educational Services	79	84	90	97	97	103	109	109	113	114	121	122	125	126	151	158	158	159
Social Services, Membership, & Misc.	177	178	172	193	233	234	256	279	309	362	371	376	423	400	426	462	477	469
Private Households	22	21	20	20	19	17	16	17	17	17	16	15	15	16	17	19	19	19
Federal Civilian Government	1148	1121	1141	974	921	965	930	921	920	931	908	933	935	915	949	978	1036	1050
Federal Military Government	143	138	149	161	172	158	147	158	166	174	184	202	204	207	221	222	230	240
State and Local Government	929	981	1018	1070	1092	1103	1162	1210	1324	1406	1451	1481	1516	1554	1584	1594	1645	1679

Source: U. S. Department Of Commerce, Bureau Of Economic Analysis, Unpublished Data provided on Diskette, July 1988.

Table 2

Employment Estimates — Wage, Salary, and Proprietors

(thousands of workers)

Part 1: Estimates For The United States

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total Employment	85936	85753	86964	92770	96854	98026	97177	99860	103324	108062	111632	112257	113313	112565	114147	119485	123176	125822
Farms	3978	3962	3915	3870	3897	3968	3948	3973	3853	3758	3848	3819	3690	3621	3710	3580	3456	3332
Ag. Services, Forestry, and Fisheries	504	520	547	575	610	625	658	703	744	809	843	889	911	934	990	1056	1110	1166
Metal Mining	95	100	94	91	92	100	96	97	97	98	107	108	111	84	69	67	58	55
Coal Mining	140	150	152	165	166	186	222	238	250	245	266	262	248	253	205	211	200	186
Oil and Gas Extraction	346	329	328	326	339	369	393	414	457	523	585	700	869	901	828	841	831	678
Nonmetallic Minerals, except Fuels	126	120	120	119	123	126	124	122	125	129	132	132	126	118	114	116	117	116
Construction	4464	4392	4660	4739	5080	5050	4669	4774	5098	5612	5897	5634	5540	5341	5460	6049	6399	6698
Lumber and Wood Products	679	655	661	690	726	708	702	761	808	848	866	793	750	674	734	789	790	812
Furniture and Fixtures	493	468	467	510	545	523	426	457	477	509	505	475	478	448	466	506	514	518
Stone, Clay, and Glass Products	673	660	650	676	712	710	647	666	689	724	733	693	671	609	613	639	633	635
Primary Metal Industries	1363	1316	1226	1231	1323	1346	1146	1157	1188	1223	1255	1153	1130	932	834	866	811	755
Fabricated Metal Products	1457	1396	1347	1400	1516	1520	1474	1529	1594	1683	1726	1629	1608	1445	1388	1478	1495	1445
Machinery, except Electrical	2069	2015	1837	1919	2124	2258	2095	2112	2213	2371	2539	2524	2529	2280	2063	2228	2222	2080
Electric and Electronic Equipment	2043	1925	1782	1840	2032	2049	1710	1786	1884	2026	2135	2116	2119	2032	2038	2224	2211	2132
Motor Vehicles and Equipment	920	814	847	946	969	911	788	878	954	1009	1001	799	796	707	752	856	880	873
Transport Equip. Excl. Motor Vehicles	1476	1255	1090	1099	1132	1105	920	913	940	1009	1087	1113	1113	1040	995	1045	1106	1153
Instruments and Related Products	481	465	438	460	496	521	549	576	620	656	691	708	729	716	699	713	719	704
Miscellaneous Manufacturing Industries	481	463	460	479	500	505	466	491	501	516	521	498	488	463	453	462	450	445
Food and Kindred Products	1812	1799	1768	1743	1730	1729	1677	1697	1723	1741	1746	1722	1692	1656	1624	1623	1613	1622
Tobacco Manufactures	81	81	77	77	79	79	73	72	70	69	69	67	70	68	66	64	62	59
Textile Mill Products	1014	987	966	1004	1037	992	872	922	916	912	893	859	831	757	752	754	706	713
Apparel and Other Textile Products	1429	1381	1358	1388	1426	1367	1260	1344	1339	1359	1325	1290	1271	1189	1193	1230	1161	1140
Paper and Allied Products	714	703	680	689	701	702	643	674	693	701	708	692	688	664	663	681	680	677
Printing and Publishing	1146	1146	1115	1135	1161	1167	1141	1170	1217	1270	1322	1342	1363	1365	1391	1471	1524	1567
Chemicals and Allied Products	1068	1057	1020	1011	1042	1063	1027	1054	1085	1106	1122	1120	1119	1090	1059	1058	1055	1034
Petroleum and Coal Products	187	189	187	185	186	191	190	195	201	206	208	204	212	199	194	185	177	168
Rubber and Misc. Plastic Products	597	579	576	625	677	673	602	650	717	758	786	728	739	693	712	786	790	792
Leather and Leather Products	347	329	303	303	301	285	254	273	266	267	255	243	248	227	213	194	171	155
Railroad Transportation	643	626	597	575	572	579	548	528	528	523	535	512	484	423	377	379	355	330
Local and Interurban Passenger Transit	342	339	339	331	329	333	330	324	322	330	329	322	321	321	324	339	347	358
Trucking and Warehousing	1314	1314	1325	1391	1470	1493	1405	1431	1531	1637	1681	1647	1623	1566	1584	1738	1796	1832
Water Transportation	235	231	209	212	214	216	207	206	207	223	223	228	234	219	207	208	204	193
Transportation by Air	358	359	348	353	373	377	373	379	395	420	454	468	466	459	468	499	531	565
Pipelines, except Natural Gas	18	17	17	17	16	16	17	18	18	20	20	22	22	21	21	19	19	18
Transportation Services	124	128	129	133	146	157	152	167	183	201	220	228	247	265	287	322	343	356
Communication	1055	1126	1129	1150	1181	1199	1184	1174	1197	1250	1321	1365	1407	1445	1383	1375	1366	1330
Electric, Gas, and Sanitary Services	694	711	725	747	764	770	756	760	777	802	834	855	885	905	918	938	957	967
Wholesale Trade	4082	4163	4227	4323	4525	4657	4868	5004	5170	5440	5669	5733	5822	5709	5682	5971	6116	6159
Retail Trade	13378	13626	13966	14334	14963	15250	15123	15750	16405	17258	17737	17809	18023	18098	18482	19459	20167	20661
Banking and Credit Agencies	1357	1423	1460	1521	1611	1700	1737	1773	1848	1956	2072	2156	2227	2256	2317	2397	2478	2587
All Other Invest. Insur. & Real Estate	3345	3491	3600	3806	4115	4183	4122	4321	4578	4889	5216	5400	5537	5635	5844	6224	6634	7129
Hotels and Other Lodging Places	961	968	996	1024	1082	1111	1058	1081	1103	1167	1209	1227	1268	1282	1310	1420	1498	1546
Personal Services	1646	1629	1565	1570	1580	1568	1554	1602	1659	1715	1744	1763	1819	1875	1993	2133	2454	2564
Business Services	1941	2016	2043	2228	2476	2627	2698	2911	3142	3446	3851	4085	4352	4726	5190	5822	6436	6911
Auto Repair, Services, and Garages	568	580	617	645	683	696	708	740	795	849	885	893	901	937	998	1107	1191	1225
Miscellaneous Repair Services	394	407	420	426	469	490	493	521	539	564	580	598	594	583	575	650	662	721
Motion Pictures	217	215	214	217	221	222	226	225	234	239	242	249	251	251	263	292	300	309
Amusement and Recreation Services	637	655	701	743	812	868	891	928	999	1041	1071	1132	1132	1171	1195	1253	1296	1303
Health Services	3124	3281	3501	3851	4149	4391	4620	4841	5073	5343	5577	5853	6189	6473	6664	6822	7102	7368
Legal Services	421	443	453	479	532	565	588	620	662	700	743	789	851	916	957	1015	1081	1146
Educational Services	1278	1309	1330	1397	1432	1472	1334	1332	1309	1360	1419	1491	1522	1553	1623	1688	1754	1790
Social Services, Membership, & Misc	2800	2840	2916	3147	3322	3422	3739	3837	4028	4340	4536	4713	4736	4771	4922	5136	5293	5495
Private Households	2330	2280	2238	2200	2097	1916	1875	1881	1936	1899	1753	1598	1606	1635	1636	1637	1596	1586
Federal Civilian Government	2919	2902	2866	2856	2839	2902	2912	2901	2894	2941	2951	3047	2970	2940	2947	2997	3059	3096
Federal Military Government	3419	3232	3061	2820	2766	2734	2656	2553	2475	2450	2425	2451	2531	2616	2657	2683	2738	2785
State and Local Government	9744	10192	10592	11001	11333	11790	12236	12359	12602	12949	13168	13303	13152	13008	13050	13192	13467	13784

Table 2 (continued)

Part 2: Estimates for the State of Utah

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total Employment	436	446	459	488	515	536	544	571	603	644	672	680	689	696	709	752	781	797
Farms	22	21	21	19	19	19	20	20	20	20	19	20	20	20	21	20	20	20
Ag. Services, Forestry, and Fisheries	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	5	5	5
Metal Mining	9	9	9	8	8	8	7	8	8	8	9	9	9	7	6	4	2	2
Coal Mining	1	1	1	2	2	2	2	3	3	3	4	5	5	5	3	3	3	3
Oil and Gas Extraction	1	1	1	2	2	3	3	2	3	4	4	5	6	6	5	6	4	3
Nonmetallic Minerals, except Fuels	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Construction	19	20	22	27	30	31	32	36	41	45	46	42	38	37	40	47	48	46
Lumber and Wood Products	2	1	2	2	2	2	3	3	4	4	4	4	4	3	4	4	4	4
Furniture and Fixtures	1	1	1	1	2	1	1	1	1	2	2	2	2	2	2	3	3	3
Stone, Clay, and Glass Products	3	3	3	3	4	4	3	4	4	4	5	4	4	4	4	4	5	4
Primary Metal Industries	9	9	8	8	8	9	8	8	8	8	8	8	9	7	6	6	5	4
Fabricated Metal Products	3	3	3	3	4	4	5	5	5	6	6	6	7	7	6	7	6	6
Machinery, except Electrical	5	6	7	7	6	9	9	9	10	10	11	12	13	13	13	15	15	14
Electric and Electronic Equipment	3	3	2	2	3	3	3	4	4	5	6	8	8	9	8	10	9	9
Motor Vehicles and Equipment	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Transport Equip. Excl. Motor Vehicles	7	6	6	6	7	7	6	5	5	6	7	8	8	9	10	11	13	13
Instruments and Related Products	1	1	1	1	1	2	2	3	3	4	5	5	4	4	4	4	4	4
Miscellaneous Manufacturing Industries	1	1	2	2	2	2	2	2	3	3	3	3	3	3	3	4	4	3
Food and Kindred Products	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	10
Tobacco Manufactures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Textile Mill Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apparel and Other Textile Products	5	5	5	6	6	6	6	7	7	7	7	6	6	6	6	6	6	6
Paper and Allied Products	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1
Printing and Publishing	4	4	4	4	5	5	5	5	6	6	6	7	7	7	7	7	8	8
Chemicals and Allied Products	1	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3
Petroleum and Coal Products	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rubber and Misc. Plastic Products	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2
Leather and Leather Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Railroad Transportation	6	6	6	5	5	5	5	5	4	5	5	5	4	4	4	4	4	3
Local and Interurban Passenger Transit	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1
Trucking and Warehousing	7	7	8	9	9	10	10	10	11	12	12	12	12	12	11	12	13	13
Water Transportation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transportation by Air	1	1	1	1	1	1	1	1	1	2	2	2	2	3	4	4	4	5
Pipelines, except Natural Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transportation Services	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Communication	5	5	5	5	6	6	6	6	6	7	7	8	8	9	9	8	8	8
Electric, Gas, and Sanitary Services	3	4	4	4	4	4	5	5	5	6	6	7	7	8	8	8	8	8
Wholesale Trade	22	22	22	24	25	27	28	29	30	33	35	36	37	36	36	36	37	38
Retail Trade	69	71	74	80	86	89	91	98	103	110	111	111	113	115	117	124	130	134
Banking and Credit Agencies	7	7	8	8	9	10	10	10	11	12	13	13	14	14	15	16	16	17
All Other Invest. Insur. & Real Estate	14	15	16	18	20	21	21	23	25	28	31	32	33	33	34	36	39	42
Hotels and Other Lodging Places	4	5	5	5	6	6	7	7	7	8	8	8	8	9	9	10	10	11
Personal Services	8	8	8	8	8	8	8	9	9	10	10	10	10	11	11	13	14	15
Business Services	7	8	9	10	10	11	13	14	15	16	19	20	22	26	28	32	37	40
Auto Repair, Services, and Garages	3	3	3	4	4	4	4	5	5	5	6	6	6	6	7	8	8	8
Miscellaneous Repair Services	2	2	3	3	3	4	3	4	4	4	4	5	5	5	4	5	5	5
Motion Pictures	2	2	2	2	2	2	2	2	2	3	3	2	2	2	2	3	2	3
Amusement and Recreation Services	3	3	4	4	5	5	5	5	5	6	6	6	6	7	7	8	8	9
Health Services	14	14	15	17	19	20	22	23	25	27	29	31	33	35	36	37	40	42
Legal Services	2	2	2	2	2	2	3	3	3	3	3	4	4	5	5	5	6	6
Educational Services	11	11	12	14	14	14	13	13	13	14	16	16	16	16	17	18	19	19
Social Services, Membership, & Misc.	12	12	13	14	16	16	17	19	21	23	24	25	25	26	26	28	29	29
Private Households	6	6	6	6	6	5	5	6	6	6	6	5	5	6	6	6	6	6
Federal Civilian Government	42	41	40	39	38	37	37	37	37	37	37	37	37	37	37	38	39	40
Federal Military Government	15	15	15	15	16	15	14	14	13	14	15	15	14	14	16	16	16	17
State and Local Government	59	63	66	69	72	74	77	77	82	86	87	87	87	87	90	93	97	100

Source: U. S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System, SA Files, August, 1988.

Table 3
Constant Dollar Gross State Product per Worker by Sector

Part 1: Estimates For The United States

(thousands of 1982 dollars per worker)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total Gross Product Per Worker	26.5	26.6	27.1	27.7	28.0	27.4	27.4	27.9	28.2	28.3	28.1	27.7	27.9	27.6	28.1	28.7	29.0	29.3
Farms	14.4	15.3	15.9	16.0	15.7	15.3	16.4	15.7	16.1	16.2	16.8	16.8	20.5	21.3	16.5	19.1	22.8	25.4
Ag. Services, Forestry, and Fisheries	15.9	15.7	15.1	15.4	15.1	14.4	12.6	12.8	12.7	13.3	13.7	13.5	13.5	13.5	13.3	13.0	13.2	13.4
Metal Mining	39.3	39.8	38.4	39.6	39.4	36.2	36.7	40.1	34.9	34.6	33.8	32.9	34.3	27.6	31.5	38.0	41.9	44.1
Coal Mining	74.2	74.3	67.3	66.3	65.4	59.3	53.5	51.8	50.6	49.5	53.0	57.0	59.8	59.7	69.7	76.4	80.4	84.4
Oil and Gas Extraction	319.9	349.7	348.5	353.9	336.5	300.5	268.7	249.9	230.2	206.5	182.6	159.5	132.9	122.3	125.6	129.5	128.2	139.6
Nonmetallic Minerals, except Fuels	34.2	35.3	35.1	37.6	39.1	38.8	36.2	39.0	39.4	41.0	41.0	41.6	44.4	37.9	43.4	47.1	47.9	45.9
Construction	41.1	38.2	36.5	35.2	33.5	32.1	32.0	33.1	32.4	31.5	29.4	28.7	26.6	26.4	27.0	26.3	25.7	25.1
Lumber and Wood Products	21.3	22.5	22.9	24.9	24.5	24.8	23.4	24.0	23.4	22.8	24.2	25.8	25.2	23.8	24.7	25.9	25.9	26.6
Furniture and Fixtures	16.5	15.0	15.8	17.6	17.7	16.9	18.3	19.7	20.6	21.7	21.4	21.5	21.0	21.3	22.3	23.3	22.5	21.9
Stone, Clay, and Glass Products	27.4	26.8	27.7	29.3	30.8	29.0	28.8	31.3	30.7	32.0	31.8	30.4	29.5	29.8	32.1	33.8	35.0	34.9
Primary Metal Industries	37.7	35.6	37.2	39.6	43.7	43.7	38.4	39.6	38.8	41.3	39.6	40.2	42.6	37.9	36.0	40.1	42.0	46.4
Fabricated Metal Products	33.1	31.6	31.4	33.4	34.3	31.2	28.3	30.8	31.6	31.2	31.8	32.2	32.5	32.0	35.3	37.8	37.3	37.9
Machinery, except Electrical	27.6	28.3	28.9	31.5	32.3	31.1	30.6	32.4	33.1	33.4	33.0	33.5	35.0	35.1	42.1	51.5	61.9	72.5
Electric and Electronic Equipment	18.3	17.9	19.3	20.8	21.6	20.0	22.0	23.2	26.3	27.9	28.2	29.6	30.3	30.4	32.5	34.8	37.9	39.9
Motor Vehicles and Equipment	39.0	32.6	42.0	42.3	46.0	40.1	42.8	51.2	54.9	54.1	47.9	42.2	42.7	41.7	51.2	55.9	54.2	51.0
Transport Equip. Excl. Motor Vehicles	26.5	27.3	28.5	29.5	29.7	32.1	36.7	35.1	34.4	35.3	34.3	34.2	29.9	31.0	38.8	40.8	41.0	42.1
Instruments and Related Products	29.1	26.4	28.4	30.4	31.0	31.2	29.4	29.5	30.6	31.2	32.6	30.8	32.5	31.6	33.1	35.6	39.4	42.2
Miscellaneous Manufacturing Industries	21.2	21.4	22.6	24.1	23.2	21.3	24.3	25.4	26.6	25.2	23.1	20.3	24.9	23.9	21.9	31.4	32.8	32.3
Food and Kindred Products	23.9	24.4	25.7	27.7	30.2	27.2	28.7	30.2	29.7	29.9	31.4	32.9	34.4	37.1	38.2	37.5	39.0	38.6
Tobacco Manufactures	100.8	107.0	115.2	118.3	120.3	121.5	136.0	137.5	135.9	143.1	141.9	141.3	142.0	130.4	136.4	136.5	118.4	119.6
Textile Mill Products	10.6	11.8	12.5	12.8	12.2	11.4	12.2	14.1	17.2	17.0	18.0	18.7	19.0	19.6	22.1	22.2	22.3	23.8
Apparel and Other Textile Products	10.5	10.1	10.4	12.0	12.5	12.4	13.3	13.4	13.9	14.4	14.8	15.6	15.5	15.9	16.6	16.5	16.9	17.1
Paper and Allied Products	28.1	26.7	29.0	31.9	35.8	33.9	31.4	35.6	37.7	39.3	38.2	35.6	35.7	40.2	43.4	44.4	45.0	46.2
Printing and Publishing	27.6	26.0	27.0	27.8	29.0	27.9	28.4	28.5	28.7	29.0	28.4	27.5	28.1	28.1	28.7	28.1	27.9	27.0
Chemicals and Allied Products	31.7	32.5	35.7	39.4	42.8	37.9	38.2	43.5	46.6	47.4	49.4	44.7	47.8	50.7	56.3	56.7	53.5	57.5
Petroleum and Coal Products	110.6	126.0	134.6	132.6	138.7	131.7	132.5	123.7	144.2	141.8	139.0	131.3	120.5	122.6	123.6	136.3	140.8	157.3
Rubber and Misc. Plastic Products	23.9	22.0	23.9	25.2	26.8	25.0	25.3	24.4	25.7	26.0	25.4	25.9	28.2	27.8	30.5	30.9	31.8	32.9
Leather and Leather Products	13.6	13.4	14.2	14.7	16.0	16.2	17.4	18.1	17.7	18.3	16.8	17.7	17.7	17.9	17.9	19.5	21.7	19.5
Railroad Transportation	46.8	46.1	43.4	45.5	47.7	48.3	46.7	51.1	51.0	53.1	52.0	53.2	51.2	45.0	50.6	53.2	55.8	59.8
Local and Interurban Passenger Transit	24.7	23.9	24.0	25.0	23.1	21.2	21.8	22.8	23.3	23.1	23.5	21.8	20.7	18.7	18.0	17.9	18.2	17.7
Trucking and Warehousing	28.0	27.9	29.6	31.9	33.2	32.7	31.4	34.1	35.0	35.0	33.7	31.3	30.2	29.7	30.7	30.7	29.2	29.6
Water Transportation	25.7	28.5	30.2	30.6	34.2	33.7	32.8	36.4	36.6	36.9	37.3	36.2	35.1	34.0	36.2	37.5	38.3	40.1
Transportation by Air	42.2	41.5	43.5	46.9	47.2	49.1	46.9	49.9	51.3	53.2	54.9	49.3	44.0	41.4	42.0	44.3	44.7	45.6
Pipelines, except Natural Gas	199.5	221.4	228.1	244.4	276.9	276.0	260.6	249.7	264.8	255.7	265.6	233.3	223.9	235.2	231.2	261.1	259.5	284.9
Transportation Services	33.4	31.3	29.0	32.6	31.6	30.7	32.3	31.0	31.0	32.5	31.6	31.7	30.4	29.3	28.9	28.5	29.3	29.1
Communication	35.5	36.3	38.1	40.9	42.8	44.2	46.7	49.5	51.7	54.1	54.9	57.5	58.9	59.3	66.6	67.5	69.0	71.6
Electric, Gas, and Sanitary Services	84.5	84.6	88.9	88.8	98.0	100.0	106.5	105.0	103.5	102.5	99.9	99.9	103.8	101.7	103.6	110.6	110.5	107.5
Wholesale Trade	36.5	36.5	38.1	40.5	40.1	38.9	38.1	38.3	39.5	39.4	38.3	37.2	37.5	38.4	39.1	42.0	44.0	45.9
Retail Trade	15.9	15.8	16.1	16.3	17.1	16.1	16.4	16.7	16.8	16.7	16.6	16.1	16.0	15.9	16.6	16.9	17.0	17.5
Banking and Credit Agencies	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.0	28.9	28.7	28.6	28.7	28.9	28.9	28.7	28.2	27.8	27.3
All Other Invest. Insur. & Real Estate	82.1	79.9	81.4	79.6	78.0	79.4	81.8	81.4	79.6	79.0	76.7	74.5	74.0	72.7	72.3	70.5	68.5	67.4
Hotels and Other Lodging Places	17.1	17.6	18.3	17.8	17.7	17.1	18.2	18.3	19.2	19.0	19.1	18.5	17.6	16.9	17.2	16.1	15.5	14.8
Personal Services	14.1	14.1	14.4	14.6	14.4	14.0	13.6	13.5	13.5	13.4	12.8	12.6	11.6	11.3	10.9	10.5	10.0	10.0
Business Services	23.9	23.6	23.3	23.0	22.6	22.4	21.2	20.8	20.7	20.8	20.4	20.6	20.3	19.2	19.3	19.1	18.7	18.8
Auto Repair, Services, and Garages	26.3	25.7	26.0	27.0	28.4	27.9	27.1	27.8	28.0	28.7	28.3	27.3	27.2	25.1	25.2	24.7	24.5	24.6
Miscellaneous Repair Services	14.9	14.5	14.1	14.8	13.9	14.9	15.1	14.4	14.8	14.6	15.4	14.8	16.3	16.5	16.9	15.7	15.6	14.1
Motion Pictures	20.0	22.5	22.0	22.2	24.0	22.2	23.0	26.0	26.3	30.5	25.1	22.9	23.0	25.0	23.6	21.6	22.4	22.4
Amusement and Recreation Services	14.1	14.0	13.3	13.0	13.3	12.7	12.7	13.1	13.0	12.6	12.7	12.1	13.0	12.9	13.5	13.1	13.9	14.0
Health Services	23.5	23.7	23.7	22.9	22.7	22.3	22.4	22.4	22.6	22.3	22.2	22.1	22.3	21.9	22.0	22.4	22.4	22.5
Legal Services	51.7	52.4	52.1	49.4	46.9	45.1	42.1	41.2	39.8	41.2	38.5	36.6	36.0	33.4	33.1	32.3	32.4	32.2
Educational Services	11.0	11.2	11.5	11.2	11.1	11.2	12.6	12.6	12.8	12.6	12.4	12.1	12.2	12.3	12.2	12.2	12.1	11.9
Social Services, Membership, & Misc.	16.5	16.4	16.2	16.4	16.5	16.5	15.7	15.6	15.9	15.8	16.4	16.4	17.3	16.0	16.0	16.0	16.0	16.0
Private Households	5.2	5.0	4.8	4.8	4.8	4.6	4.4	4.5	4.5	4.5	4.5	4.6	4.6	4.6	5.0	5.4	5.5	5.7
Federal Civilian Government	29.2	28.3	28.1	27.1	26.5	26.7	26.7	27.7	28.1	28.6	28.4	27.5	27.8	27.2	27.9	28.0	28.2	27.8
Federal Military Government	15.4	15.5	15.7	16.2	16.5	16.6	16.4	16.4	16.8	16.9	16.9	17.4	17.8	17.8	18.0	17.6	17.5	17.5
State and Local Government	18.4	18.3	18.3	18.3	18.4	18.4	18.1	18.2	18.1	18.2	18.4	18.4	18.8	18.9	18.9	18.9	18.9	18.7

Table 3 (Continued)

Part 2: Estimates for the State of Utah

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total Gross Product Per Worker	24.3	24.1	24.5	24.8	25.5	24.7	24.8	25.1	25.4	25.8	25.7	25.9	26.3	26.7	26.2	26.8	26.8	25.6
Farms	11.7	13.7	14.0	14.6	13.5	12.5	11.2	12.4	12.0	11.7	14.5	15.7	15.6	17.2	15.2	14.8	16.9	19.5
Ag. Services, Forestry, and Fisheries	13.0	12.8	12.6	12.8	11.9	11.6	10.6	10.7	11.0	11.1	11.0	10.8	11.3	11.7	10.8	11.0	10.4	9.9
Metal Mining	35.4	34.4	36.0	38.7	31.7	32.6	33.3	34.5	30.7	29.5	32.5	33.3	34.7	25.2	35.1	42.0	46.8	54.2
Coal Mining	69.9	59.0	51.6	50.5	57.2	53.0	54.0	60.3	63.3	59.7	59.1	62.5	66.4	66.4	79.3	86.9	91.2	97.8
Oil and Gas Extraction	339.5	328.6	268.8	224.8	245.6	221.2	204.5	201.7	196.4	170.4	137.6	115.8	98.6	82.7	82.4	86.9	91.3	94.3
Nonmetallic Minerals, except Fuels	27.9	29.6	26.2	26.9	28.8	30.9	31.0	38.0	38.8	39.4	41.9	43.8	47.1	40.2	46.9	50.7	51.3	50.5
Construction	38.6	36.1	34.6	34.8	32.5	31.0	30.3	32.3	31.8	29.8	28.3	27.2	25.6	25.3	25.5	24.8	24.1	22.7
Lumber and Wood Products	16.7	19.1	19.8	22.5	20.7	21.1	20.7	20.4	19.1	18.0	18.3	20.2	19.4	17.1	16.4	17.6	17.5	17.4
Furniture and Fixtures	13.0	11.7	12.5	13.1	13.9	14.2	15.9	17.8	17.4	18.9	18.5	18.1	16.9	18.1	19.0	19.6	19.5	19.4
Stone, Clay, and Glass Products	31.8	29.0	31.8	33.6	35.3	31.8	32.3	35.7	34.1	35.5	34.4	32.8	31.5	32.4	35.7	37.6	37.2	37.6
Primary Metal Industries	54.4	50.2	50.0	54.8	57.0	55.6	43.8	41.0	37.6	38.5	38.3	41.3	44.7	43.0	39.6	46.5	50.7	55.1
Fabricated Metal Products	40.4	37.4	36.2	38.7	39.9	35.2	31.3	33.9	34.8	34.0	31.2	31.7	30.5	28.7	30.8	32.9	32.0	32.1
Machinery, except Electrical	23.4	26.0	27.6	30.6	31.6	28.1	30.1	32.8	33.7	35.4	35.0	37.1	42.3	43.8	52.7	63.9	78.6	93.2
Electric and Electronic Equipment	18.3	16.3	18.1	18.4	17.9	15.4	17.2	18.5	22.1	23.3	23.4	24.3	24.9	23.9	25.6	27.2	29.6	30.7
Motor Vehicles and Equipment	32.3	26.6	35.5	39.7	37.5	28.9	32.9	38.6	39.5	42.9	37.3	29.2	37.8	42.4	52.9	55.0	54.9	49.8
Transport Equip. Excl. Motor Vehicles	27.7	30.4	34.5	34.8	33.4	35.2	37.9	36.2	36.4	36.5	35.4	36.1	34.4	34.1	37.5	41.3	42.1	43.4
Instruments and Related Products	21.4	19.5	17.2	13.9	14.9	15.8	17.2	17.8	18.3	18.9	18.0	17.2	18.4	18.8	21.4	24.6	30.7	33.8
Miscellaneous Manufacturing Industries	13.0	12.5	13.1	14.2	13.1	12.6	13.4	14.3	13.8	14.8	13.3	11.6	13.0	12.6	11.6	15.1	17.6	17.5
Food and Kindred Products	15.3	15.6	16.1	17.4	19.2	17.4	18.5	19.2	19.6	19.8	21.1	21.9	22.9	24.4	25.0	24.8	26.4	25.8
Tobacco Manufactures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Textile Mill Products	10.6	9.5	9.6	9.4	8.1	8.7	11.4	24.7	24.4	22.0	23.0	17.9	20.0	10.8	16.5	19.1	19.4	15.6
Apparel and Other Textile Products	7.2	6.8	6.6	7.0	7.6	8.2	8.8	9.2	9.7	10.8	11.8	12.7	13.4	13.4	13.6	12.8	13.1	13.2
Paper and Allied Products	31.9	27.9	31.5	36.2	40.1	33.4	27.6	27.2	25.6	26.6	27.9	27.3	28.1	33.3	37.8	39.3	38.5	41.0
Printing and Publishing	20.0	18.3	18.0	17.8	19.0	19.3	19.8	20.9	21.3	23.0	23.7	23.7	25.3	26.5	26.7	27.1	26.9	24.9
Chemicals and Allied Products	18.5	19.2	21.1	22.5	24.3	21.5	22.2	24.0	26.9	33.9	39.0	40.9	49.7	59.4	68.5	70.2	65.8	69.1
Petroleum and Coal Products	105.3	148.9	170.1	176.8	216.1	129.1	156.5	181.2	174.1	174.3	154.3	145.3	155.2	174.0	217.4	271.9	296.4	315.4
Rubber and Misc. Plastic Products	15.7	15.1	14.0	15.1	18.8	21.0	25.1	25.6	33.8	30.9	29.1	27.4	29.0	24.9	25.8	27.4	29.0	31.8
Leather and Leather Products	13.7	11.6	19.4	19.4	24.7	23.5	13.5	24.1	27.0	15.6	13.9	14.5	18.4	14.6	12.2	14.1	19.2	18.9
Railroad Transportation	47.0	46.5	44.1	47.0	47.5	47.2	43.8	45.1	43.0	46.5	49.1	52.7	53.8	52.2	58.6	60.2	62.3	74.5
Local and Interurban Passenger Transit	24.4	24.0	24.4	24.5	21.8	19.5	21.7	23.7	27.3	28.0	30.3	28.2	26.3	21.1	20.0	18.7	18.2	17.6
Trucking and Warehousing	31.9	31.4	33.7	36.2	36.0	35.2	33.7	36.0	36.6	35.9	34.5	31.7	30.6	29.1	28.8	29.5	27.8	27.6
Water Transportation	0.0	0.0	0.0	0.0	0.0	0.0	11.5	18.0	17.5	13.2	17.8	15.9	16.9	14.0	16.5	0.0	0.0	0.0
Transportation by Air	38.9	41.1	45.0	49.1	50.6	53.9	48.3	53.8	50.1	51.8	48.7	42.4	39.1	39.3	42.8	44.6	39.7	38.3
Pipelines, except Natural Gas	321.4	344.3	338.7	349.2	391.3	343.4	318.2	293.5	300.0	494.6	677.4	738.3	805.6	961.2	964.7	1087.5	1071.4	1132.5
Transportation Services	26.5	25.8	23.0	28.8	29.1	28.6	31.0	29.4	29.7	28.7	28.2	25.8	26.0	24.2	25.9	26.4	25.7	25.4
Communication	34.9	35.7	37.4	39.5	42.1	42.6	44.9	49.2	52.4	53.9	52.6	55.8	59.7	52.3	58.3	61.1	63.7	63.3
Electric, Gas, and Sanitary Services	75.5	75.6	81.6	82.7	90.3	91.4	99.9	96.4	94.2	99.7	101.3	112.0	128.1	126.7	136.1	138.1	135.9	131.0
Wholesale Trade	31.8	32.2	33.6	35.2	35.0	33.6	33.7	33.5	34.6	34.9	33.9	33.1	33.2	33.8	34.6	37.3	39.3	40.1
Retail Trade	14.0	13.9	14.2	14.7	15.0	14.3	14.6	14.9	15.2	15.2	15.3	14.9	14.9	14.6	15.4	15.8	15.8	16.0
Banking and Credit Agencies	26.6	25.8	24.4	23.1	22.1	21.9	21.1	21.4	20.1	21.0	21.1	21.3	22.5	22.8	22.2	22.4	21.4	20.8
All Other Invest. Insur. & Real Estate	73.3	70.3	74.8	75.2	70.4	73.8	80.4	75.8	74.1	78.4	74.7	74.8	68.3	68.0	67.9	65.4	62.7	59.0
Hotels and Other Lodging Places	13.7	14.7	14.2	15.6	13.6	14.0	16.0	16.0	17.1	17.1	17.2	17.2	15.6	16.2	15.3	16.0	13.0	12.4
Personal Services	11.6	11.9	11.9	12.2	12.1	11.9	12.0	11.5	11.7	11.6	11.4	11.3	10.2	10.1	9.8	9.3	9.0	8.8
Business Services	16.2	15.5	15.9	16.0	16.4	17.0	16.1	15.7	16.5	16.9	16.5	16.7	16.3	13.7	14.1	14.4	14.0	13.5
Auto Repair, Services, and Garages	25.2	24.5	25.1	26.1	28.2	27.8	27.1	27.7	27.8	28.8	28.6	28.3	28.1	26.0	26.1	25.3	25.0	24.6
Miscellaneous Repair Services	13.4	12.8	12.6	14.1	13.2	14.5	15.5	14.4	15.3	14.9	15.6	14.9	16.1	17.4	17.0	15.4	15.3	13.3
Motion Pictures	14.9	12.9	15.4	15.8	14.3	12.7	14.6	17.4	18.8	25.3	14.8	12.9	11.0	12.5	11.9	14.9	16.2	13.8
Amusement and Recreation Services	10.7	11.1	11.9	12.2	13.4	11.5	11.2	11.3	11.5	10.8	10.9	10.3	10.9	10.6	10.9	11.1	11.7	11.0
Health Services	22.5	22.7	23.0	20.9	20.5	20.2	20.4	20.8	21.5	20.1	19.9	20.3	20.5	20.1	19.3	19.7	19.3	19.4
Legal Services	41.5	42.4	39.6	38.2	36.7	37.4	36.3	36.3	36.7	35.3	30.7	27.4	27.7	25.5	24.8	23.6	24.4	24.2
Educational Services	7.2	7.3	7.2	7.0	6.9	7.1	8.3	8.3	8.4	8.1	7.8	7.7	7.8	7.9	8.9	9.0	8.4	8.2
Social Services, Membership, & Misc.	15.1	14.9	13.7	13.5	14.7	14.5	14.7	14.6	15.0	15.0	15.6	14.9	16.6	15.6	16.2	16.5	15.6	16.1
Private Households	3.8	3.6	3.4	3.4	3.3	3.2	3.0	3.1	2.9	2.9	2.9	2.8	2.8	2.8	3.0	3.3	3.3	3.4
Federal Civilian Government	27.6	27.3	28.3	24.7	24.5	25.8	25.3	25.2	25.0	25.1	24.7	25.1	25.1	24.5	25.5	26.0	26.2	26.0
Federal Military Government	9.8	9.2	10.3	11.0	10.9	10.4	10.5	11.6	12.3	12.6	12.7	13.2	14.2	14.3	14.2	14.0	13.9	13.9
State and Local Government	15.7	15.6	15.5	15.4	15.2	15.0	15.2	15.7	16.1	16.3	16.7	17.0	17.5	17.8	17.6	17.2	16.9	16.8

Source: Calculated from Unrounded Form of Data in Tables 1 and 2

Table 4

Trends in Constant Dollar Gross Product per Worker
Calculated for Total Economic Activity and for Major Groups and Mining and Manufacturing Sectors

(percent per year)

Part 1

United States and Utah for Periods

	1969-1979		1979-1986	
	U.S.	Utah	U.S.	Utah
Total	0.11	0.08	0.72	0.57
Private Industries	0.12	0.09	0.51	0.49
Agriculture, Forestry, and Fisheries	0.10	0.74	1.55	4.51
Mining	0.58	0.73	0.39	-4.37
Coal Mining	0.34	0.96	6.47	7.62
Oil and Gas Extraction	1.47	0.75	3.60	5.03
Metal Mining	0.61	0.08	4.49	7.35
Nonmetallic Minerals, except Fuels	0.74	0.08	2.14	2.93
Construction	0.15	0.36	1.39	2.06
Manufacturing	0.38	0.33	4.75	6.09
Nondurable Goods	0.17	0.91	2.31	4.64
Food and Kindred Products	0.42	0.16	1.05	3.08
Textile Mill Products	0.84	0.00	4.56	0.05
Apparel and Other Textile Products	1.16	0.58	1.86	0.99
Paper and Allied Products	0.56	0.30	3.84	0.05
Printing and Publishing	0.27	0.53	-0.91	1.41
Chemicals and Allied Products	0.15	1.04	3.51	3.01
Petroleum and Coal Products	0.37	1.79	1.41	12.47
Tobacco Manufactures	0.60	0.00	2.57	0.05
Rubber and Misc. Plastic Products	0.44	1.15	3.79	0.94
Leather and Leather Products	0.48	0.00	2.80	0.05
Durable Goods	0.29	0.34	5.15	6.85
Lumber and Wood Products	0.44	0.66	0.95	1.70
Furniture and Fixtures	0.45	0.51	0.87	1.49
Primary Metal Industries	0.58	0.94	1.29	4.30
Fabricated Metal Products	0.67	0.55	2.89	0.66
Machinery, except Electrical	0.91	0.54	11.60	14.32
Electric and Electronic Equipment	0.69	1.00	4.92	7.82
Transport Equipment Excl. Motor Vehicles	0.34	0.43	4.17	3.40
Motor Vehicles and Equipment	0.81	1.00	5.22	7.78
Stone, Clay, and Glass Products	0.28	0.46	2.19	2.22
Instruments and Related Products	0.40	0.29	4.30	9.90
Misc. Manufacturing Industries	0.57	0.45	6.31	5.22
Transport, Communication, and Utilities	0.21	0.12	1.05	2.29
Wholesale Trade	0.30	0.27	2.91	2.87
Retail Trade	0.25	0.19	1.02	1.00
Finance, Insurance, and Real Estate	0.13	0.09	1.42	-2.73
Services	0.35	0.19	-0.52	-0.99
Government	0.07	0.31	0.22	0.26
Federal Civilian Government	0.32	0.35	0.04	0.87
Federal Military Government	0.13	0.42	0.29	1.07
State and Local Government	0.06	0.27	0.31	0.87

Source: Calculated by the BEBR with Ordinary Least Squares on the Natural Logs of Ratios of the BEA REIS Output and Employment Data

Part 2

Component Sectors Ranked by 1979-1986 Trend in Growth Rate

U.S. 1979-1986		Utah 1979-1986	
Machinery, except Electrical	11.60	Machinery, except Electrical	14.32
Coal Mining	6.47	Petroleum and Coal Products	12.47
Misc. Manufacturing Industries	6.31	Instruments and Related Products	9.90
Electric and Electronic Equipment	4.92	Chemicals and Allied Products	9.01
Metal Mining	4.49	Motor Vehicles and Equipment	7.78
Transport Equip. Excl. Motor Vehicles	4.17	Coal Mining	7.62
Textile Mill Products	4.06	Metal Mining	7.35
Instruments and Related Products	4.00	Misc. Manufacturing Industries	5.22
Paper and Allied Products	3.84	Primary Metal Industries	4.30
Rubber and Misc. Plastic Products	3.79	Electric and Electronic Equipment	3.82
Motor Vehicles and Equipment	3.22	Transport Equip. Excl. Motor Vehicles	3.40
Chemicals and Allied Products	3.07	Food and Kindred Products	3.08
Food and Kindred Products	3.05	Nonmetallic Minerals, except Fuels	2.93
Fabricated Metal Products	2.89	Wholesale Trade	2.87
Wholesale Trade	2.91	Transport, Communication, and Utilities	2.29
Leather and Leather Products	2.80	Stone, Clay, and Glass Products	2.22
Stone, Clay, and Glass Products	2.19	Furniture and Fixtures	1.49
Nonmetallic Minerals, except Fuels	2.14	Printing and Publishing	1.41
Petroleum and Coal Products	1.87	Federal Military Government	1.07
Apparel and Other Textile Products	1.86	Retail Trade	1.00
Primary Metal Industries	1.29	Apparel and Other Textile Products	0.99
Transport, Communication, and Utilities	1.05	Rubber and Misc. Plastic Products	0.94
Retail Trade	1.02	Federal Civilian Government	0.87
Lumber and Wood Products	0.95	Fabricated Metal Products	0.66
Furniture and Fixtures	0.87	Textile Mill Products	0.05
State and Local Government	0.31	Tobacco Manufactures	0.05
Federal Military Government	0.29	Leather and Leather Products	0.05
Federal Civilian Government	0.04	Paper and Allied Products	0.05
Printing and Publishing	-0.91	State and Local Government	-0.07
Services	-0.52	Services	-0.99
Finance, Insurance, and Real Estate	-1.42	Lumber and Wood Products	-1.70
Agriculture, Forestry, and Fisheries	-1.55	Construction	-2.66
Construction	-1.99	Finance, Insurance, and Real Estate	-2.73
Tobacco Manufactures	-2.57	Agriculture, Forestry, and Fisheries	-4.51
Oil and Gas Extraction	-3.60	Oil and Gas Extraction	-5.03

1979-1986 Trends in Gross Product per Worker
U.S. and Utah for Selected Industries

Chart 4
Machinery, except Electrical

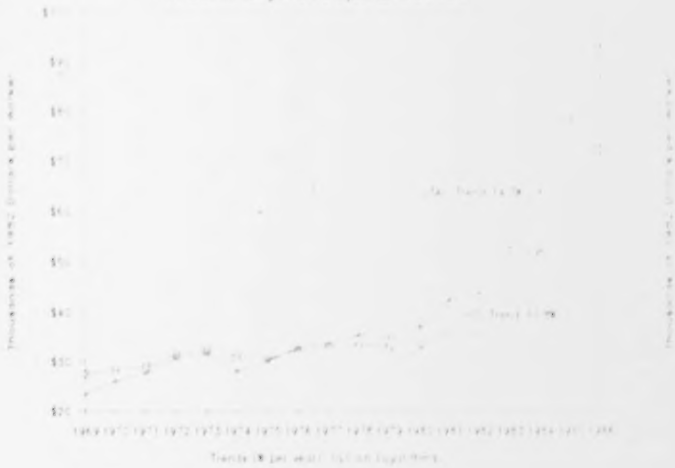


Chart 5
Petroleum and Coal Products

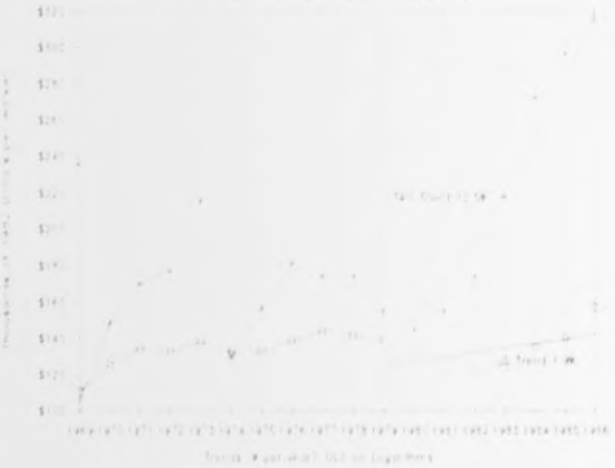


Chart 6
Instruments and Related Products

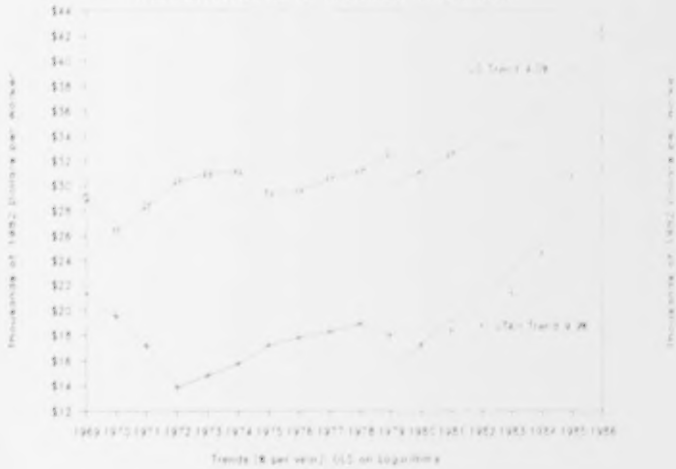


Chart 7
Chemicals and Allied Products

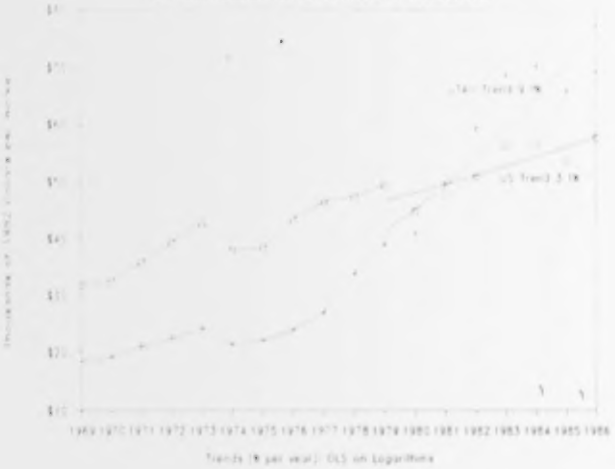


Chart 8
Motor Vehicles and Equipment

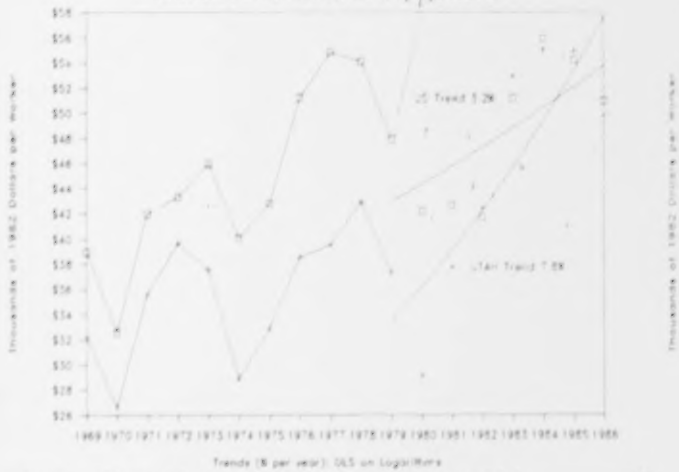
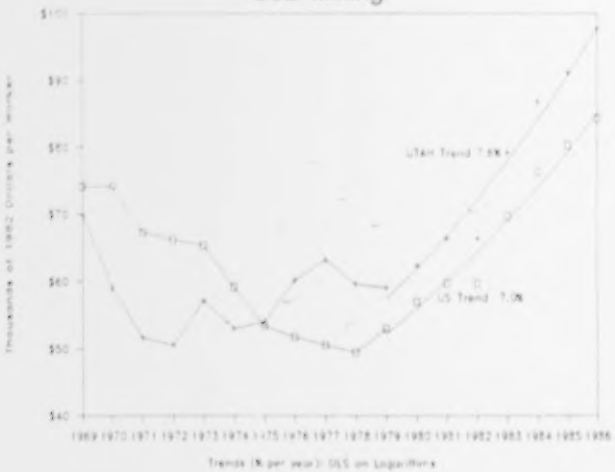


Chart 9
Coal Mining



Source: Derived from data appearing in Tables 3 and 4.

Utah Business Statistics

UTAH DATA	Apr. 1988	Apr. 1989	% Change from Year Ago	12 Month Average This Year	12 Month Average Last Year	12 Month Average % Change
Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.)	20,071	NA	NA	NA	19,441	NA
New Corporations (no.)	477	468	-1.9%	450	473	-5.0%
New Car, Truck, and Motor Home Sales (no.)	5,604	NA	NA	NA	5,256	NA
Agriculture						
Average Prices Recorded by Farmers (dol.)						
Beef Steers and Heifers (cwt) (thous.)	70.70	72.90	3.1%	70.08	65.66	6.7%
Lambs (cwt)	61.90	59.60	-3.7%	60.60	71.80	-15.6%
Milk, Wholesale (cwt)	11.20	11.40	1.8%	11.78	11.79	-0.1%
Alfalfa Hay, Baled (per ton)	74.00	85.00	14.9%	79.33	70.25	12.9%
Cattle Slaughtered (live weight) (thous. of lbs.)	45,932	43,532	-5.2%	46,757	43,761	6.8%
Construction						
Total Construction (thous. of dol.) 1	72,7918	86,854.2	19.3%	68,515.4	NA	NA
Residential	36,777.0	39,593.7	7.7%	33,392.4	NA	NA
Nonresidential	23,053.5	30,211.6	31.0%	22,281.0	NA	NA
Additions, Alterations, and Conversions	12,960.3	17,048.9	31.5%	12,842.0	NA	NA
Total Permit Construction (thous. of dol.) 2	86,406.0	94,589.0	9.5%	74,017.8	80,562.7	-8.1%
Residential	36,641.1	44,850.1	22.4%	34,927.8	36,597.8	-4.6%
Nonresidential	33,944.9	32,561.4	-4.1%	25,152.2	30,169.4	-16.6%
Additions, Alterations, and Repairs	15,820.0	17,177.5	8.6%	13,937.7	13,795.5	1.0%
New Dwelling Units (no.)	523	544	4.0%	472	521	-9.4%
Employment						
Civilian Labor Force (thous.)	742.8	766.2	3.2%	761.5	753.4	1.1%
Total Employed Persons	702.2	729.1	3.8%	727.0	709.8	2.4%
Unemployed Persons	40.6	37.1	-8.6%	34.4	43.6	-21.1%
Percent Total Labor Force	5.5	4.8	-12.7%	4.5	5.8	-22.0%
Employees on Nonagricultural Payrolls (thous. of jobs)	651.2	678.0	4.1%	665.9	644.8	3.3%
Manufacturing	96.9	100.7	3.9%	99.3	94.5	5.1%
Mining	8.3	7.6	-8.4%	8.0	8.2	-2.0%
Contract Construction	23.3	23.6	1.3%	24.6	25.5	-3.6%
Transportation, Communication, and Utilities	38.3	39.3	2.6%	39.7	38.1	4.3%
Wholesale Trade	34.5	37.0	7.2%	35.5	34.8	1.8%
Retail Trade	117.4	123.2	4.9%	121.8	118.3	3.0%
Finance, Insurance, and Real Estate	33.1	33.2	0.3%	33.4	33.7	-0.9%
Services 3	154.1	164.4	6.7%	160.2	149.8	7.0%
Federal Government	39.5	40.6	2.8%	39.6	39.5	0.1%
State Government 4	39.5	40.5	2.5%	38.6	38.0	1.4%
Local Government 4	66.3	67.9	2.4%	65.3	64.1	1.8%
Average Weekly Hours						
Manufacturing	40.2	39.3	-2.2%	40.4	40.1	0.9%
Mining	44.5	41.2	-7.4%	41.1	42.3	-2.8%
Wholesale Trade	38.1	36.1	-5.2%	36.8	38.3	-4.0%
Retail Trade	28.5	27.0	-5.3%	27.7	28.2	-1.6%
Amount of Unemployment Compensation (thous. of dol.)	6,272.7	5,164.3	-17.7%	5,399.7	6,753.3	-20.0%
Finance						
Savings, Savings and Loan Association (mil. of dol.)	2,461.6	2,191.7	-11.0%	2,351.0	2,378.2	-1.1%
Tax Collections by the State of Utah (thous. of dol.)						
Total Tax Collections	148,704.9	167,403.7	12.6%	149,602.3	144,830.0	3.3%
Sales and Use Tax	11,832.5	19,201.4	62.3%	54,799.2	47,999.6	14.2%
Motor Fuel Tax	8,421.4	9,186.4	9.1%	10,984.5	10,300.4	6.6%
Individual Income Tax	94,881.7	99,278.0	4.6%	52,850.6	53,638.2	-1.5%
Corporation Franchise Tax	17,974.2	23,114.6	28.6%	7,398.9	6,039.3	22.5%
Production						
Crude Oil to Refineries (thous. of bbls.)	4,212.5	NA	NA	NA	3,845.4	NA
Crude Oil (thous. of bbls.)	2,829.1	2,293.4	-18.9%	2,602.9	2,916.6	-10.8%
Natural Gas (mil. of cu. ft.)	22,307.8	21,410.4	-4.0%	22,996.8	22,633.8	1.6%
Coal (thous. short tons)	1,441.0	1,341.0	-6.9%	1,460.6	1,482.6	-1.5%
Tourism/Travel						
Air Passengers (total no. on and off)(S.L. Int'l Airport)	773,179	879,527	13.8%	899,653	912,861	-1.4%
Highway Traffic Count Across State Lines	NA	38,156	NA	NA	NA	NA
Transient Room Taxes (thous. of dol.)	-1,397.8	189.7	-113.6%	595.9	438.0	36.1%
Visits, State, Nat'l. Parks-Monuments (thous.)	941.6	925.2	-1.7%	1,102.3	1,075.9	2.5%
Utilities						
Telephone Lines in Service (Mt. Bell)(Residential)	487,516	498,357	2.2%	492,065	482,750	1.9%
Telephone Lines in Service (Mt. Bell)(Nonresidential)	179,652	185,010	3.0%	182,852	177,516	3.0%
Electric Customers (Residential)	475,965	482,084	1.3%	478,875	474,827	0.9%
Electric Customers (Commercial)	46,561	47,898	2.9%	47,287	46,383	1.9%
Natural Gas Customers (Residential & Commercial)	462,338	473,794	2.5%	463,050	450,706	2.7%
Natural Gas Customers (Industrial)	547	567	3.7%	554	550	0.7%

Utah Business Statistics

UTAH DATA	Apr. 1988	Apr. 1989	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
Davis County						
Non-Ag. Employment (thous.)	51.3r	53.2f	3.7%	53.0	51.9	2.1%
Unemployment Rate	4.5r	3.7	-17.8%	3.9	5.2	-24.4%
Auth. Permit Construction (thous. of dol.)	17,223.0	11,978.5	-30.5%	8,449.6	9,972.0	-15.3%
New Dwelling Units (no.)	87	76	-12.6%	65	79	-17.1%
Postal Receipts (thous. of dol.)	457.1	488.5	6.9%	477.3	390.6	22.2%
Electric Customers (Residential)	47,935	48,998	2.2%	48,355	47,672	1.4%
Electric Customers (Commercial)	3,403	3,786	11.3%	3,549	3,334	6.5%
Natural Gas Customers (Residential)	50,319	51,777	2.9%	50,907	49,307	3.2%
Natural Gas Customers (Industrial)	52	56	7.7%	54	52	3.0%
Telephone Lines in Service (Mt. Bell)(Residential)	55,130	56,617	2.7%	55,818	54,935	1.6%
Telephone Lines in Service (Mt. Bell)(Nonresidential)	11,218	11,825	5.4%	11,560	10,804	7.0%
Salt Lake County						
Non-Ag. Employment (thous.)	336.6r	348.3f	3.5%	343.5	334.5	2.7%
Unemployment Rate	4.7r	4.3	-8.5%	4.1	5.3	-23.9%
Auth. Permit Construction (thous. of dol.)	43,466.4	33,800.4	-22.2%	32,142.0	36,866.2	-12.8%
New Dwelling Units (no.)	193	195	1.0%	181	189	-4.3%
Postal Receipts (thous. of dol.)	8,172.1	8,744.7	7.0%	8,304.2	7,441.8	11.6%
Electric Customers (Residential)	239,319	242,424	1.3%	240,900	237,494	1.4%
Electric Customers (Commercial)	20,376	20,835	2.3%	20,599	20,108	2.4%
Natural Gas Customers (Residential)	222,700	225,738	1.4%	221,890	218,272	1.7%
Natural Gas Customers (Industrial)	237	241	1.7%	238	236	0.9%
Telephone Lines in Service (Mt. Bell)(Residential)	229,694	234,075	1.9%	231,682	228,007	1.6%
Telephone Lines in Service (Mt. Bell)(Nonresidential)	110,338	112,129	1.6%	111,611	110,185	1.3%
Utah County						
Non-Ag. Employment (thous.)	79.8r	84.5f	5.9%	79.9	76.3	4.8%
Unemployment Rate	4.1r	3.8	-7.3%	3.7	5.9	-36.7%
Auth. Permit Construction (thous. of dol.)	7,060.0	16,592.2	135.0%	11,877.8	11,601.2	2.4%
New Dwelling Units (no.)	58	77	32.8%	69	75	-7.8%
Postal Receipts (thous. of dol.)	1,191.5	1,373.0	15.2%	1,297.0	970.7	33.6%
Electric Customers (Residential)	52,026	52,701	1.3%	52,613	52,542	0.1%
Electric Customers (Commercial)	5,924	5,907	-0.3%	5,995	6,123	-2.1%
Natural Gas Customers (Residential)	62,749	63,711	1.5%	62,145	60,756	2.3%
Natural Gas Customers (Industrial)	68	74	8.8%	70	69	1.8%
Telephone Lines in Service (Mt. Bell)(Residential)	64,695	66,471	2.7%	65,271	63,214	3.3%
Telephone Lines in Service (Mt. Bell)(Nonresidential)	19,794	21,258	7.4%	20,635	19,219	7.4%
Weber County						
Non-Ag. Employment (thous.)	61.8r	63.8f	3.2%	62.1	60.5	2.6%
Unemployment Rate	5.8r	4.4	-24.1%	4.9	6.9	-28.2%
Auth. Permit Construction (thous. of dol.)	6,119.6	8,803.3	43.9%	5,237.6	7,661.3	-31.6%
New Dwelling Units (no.)	65	77	18.5%	44	61	-27.7%
Postal Receipts (thous. of dol.)	722.7	733.2	1.5%	686.3	624.1	10.0%
Electric Customers (Residential)	53,505	54,240	1.4%	53,778	53,096	1.3%
Electric Customers (Commercial)	4,929	5,056	2.6%	4,963	4,883	1.6%
Natural Gas Customers (Residential)	50,150	50,761	1.2%	50,078	49,202	1.8%
Natural Gas Customers (Industrial)	83	86	3.6%	83	85	-1.8%
Telephone Lines in Service (Mt. Bell)(Residential)	46,383	47,267	1.9%	46,795	46,077	1.6%
Telephone Lines in Service (Mt. Bell)(Nonresidential)	11,785	12,200	3.5%	12,075	11,279	7.1%

1 Obtained from U.S. Bureau of the Census Construction Statistics Division.
2 Obtained from *Utah Construction Report*.
3 Includes services by nonprofit and religious organizations.
4 Includes public schools and college institutions.

NA Not Available
r Revised
f Forecast

Sources:

Personal Income	U.S. Department of Commerce, Bureau of Economic Analysis.
New Corporations	Utah Secretary of State.
New Car and Truck Sales	Utah State Tax Commission, Economic and Statistical Unit.
Agriculture	U.S. Department of Agriculture, Utah Agricultural Statistics Service, *Utah Agriculture*.
Construction Data	U.S. Bureau of the Census and Bureau of Economic and Business Research, *Utah Construction Report*.
Employment Data	Utah Department of Employment Security.
Savings Information	Utah Savings and Loan Institutions.
Tax Collections	Utah State Tax Commission.
Crude Oil Production	Area Oil Refineries.
Natural Gas Production	Utah Department of Oil, Gas, and Mining.
Coal Production	U.S. Department of Energy.
Air Passengers	Salt Lake City International Airport, Statistics Division.
Highway Traffic Count	Utah Department of Transportation.
Visits to State and National Parks and Monuments	U.S. Forest Service, Utah State Parks and Recreation Department.
Utilities Data	Cooperating Utah Utility Companies.
Postal Receipts	Postmasters in Davis, Salt Lake, Utah, and Weber Counties.

Bureau of Economic and
Business Research
University of Utah
Salt Lake City, Utah 84
Return Postage Guarant
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Permit No. 1529
Salt Lake City, Utah

NATIONAL DATA	Apr. 1988	Apr. 1989	% Change from Year Ago	12 Month Average This Year	12 Month Average Last Year	12 Month Average % Change
U.S. Gross National Product (seasonally adjusted) (bil. of dol.) (qtly.)	4,818.5	5,194.9	7.8%	5,003.7	4,642.2	7.8%
Total Personal Income (seasonally adjusted) (bil. of dol.)	4,007.1	4,386.5	9.5%	4,188.4	3,870.4	8.2%
Industrial Production Indexes (seasonally adjusted) (1977=100)	135.4	141.6	4.6%	139.3	132.4	5.2%
Total Non-Farm Bus. Expend. on New Plants & Equip. (bil.) (qtly.)	426.9	467.5	9.5%	444.4	402.3	10.5%
Net Exports of Goods and Services (bil. of dol.)	-74.9	-52.4	-30.0%	-64.6	-103.5	-37.6%
Exports of Goods and Services (bil. of dol.)	532.5	625.2	17.4%	576.4	482.8	19.4%
Imports of Goods and Services (bil. of dol.)	607.5	677.5	11.5%	641.0	586.3	9.3%
Index of Leading Indicators (1982=100)	141.5	145.6	2.9%	144.2	140.6	2.6%
Price Indexes						
Consumer Price Indexes (not seasonally adjusted) (1982-84=100):						
CPI-U (All Urban Consumers) All Items	117.1	123.1	5.1%	120.2	115.1	4.4%
CPI-U (All Urban Consumers) Food & Beverages	116.7	124.0	6.3%	120.5	114.7	5.1%
CPI-U (All Urban Consumers) Housing	117.3	121.6	3.7%	119.9	115.6	3.7%
CPI-U (All Urban Consumers) Transportation	107.2	114.6	6.9%	110.5	106.6	3.7%
CPI-U (All Urban Consumers) Medical Care	136.9	146.8	7.2%	141.9	132.8	6.8%
CPI-U (All Urban Consumers) Energy	87.3	94.9	8.7%	90.5	89.3	1.4%
Producer Price Index (not seasonally adjusted) (1982=100):						
Producer Price Index, All Finished Goods	106.9	113.0	5.7%	109.9	106.0	3.6%
GNP Price Deflator (1982=100) (qtly.)	120.6	126.0	4.5%	123.0	118.5	3.8%
Civilian Employment (seasonally adjusted)						
Total Civilian Labor Force (mil.)	121.3	123.7	2.0%	122.4	120.5	1.6%
Total Civilian Employment (mil.)	114.7	117.1	2.1%	115.9	113.4	2.2%
Unemployment Rate	5.5	5.3	-3.6%	5.4	5.9	-9.3%
Construction						
Total Construction (mil. of dol.)	22,343.9	21,724.6	-2.8%	20,398.1	21,397.0	-4.7%
Residential	10,679.0	10,998.7	3.0%	9,846.1	9,910.5	-0.6%
Nonresidential	6,905.1	6,509.6	-5.7%	6,891.3	7,593.5	-9.2%
Non-Building	4,759.8	4,216.3	-11.4%	3,660.7	3,915.5	-6.5%
New Dwelling Units (no.)	131,786	126,621	-3.9%	116,159	126,149	-7.9%
Interest Rates						
Federal Funds Rate	6.87	9.84	43.2%	8.51	6.81	25.0%
Short Term (3-month Treasury bill rate)	5.92	8.70	47.0%	7.60	5.90	28.8%
Long Term (30-year Treasury bond yields)	8.91	9.18	3.0%	9.14	8.93	2.4%
Prime Rates Charged by Banks on Short-term Business Loans (avg.)	8.50	11.50	35.3%	10.16	8.54	19.0%
Mortgage Rates (new homes)	8.76	9.88	12.8%	9.08	8.89	2.1%

Sources: *Business Conditions Digest*, U.S. Department of Commerce: U.S. Gross National Product, Total National Personal Income, Industrial Production Indexes, Total Business Expenditures for New Plant Equipment, Export/Import Data, Index of Leading Indicators, GNP Price Deflator, National Employment Data, Interest Rates

F.W. Dodge Report, McGraw-Hill: National Construction Data

Survey of Current Business, U.S. Department of Commerce: New Home Mortgage Rates

Utah Labor Market Report, Utah Department of Employment Security: Consumer Price Indexes, Producer Price Index

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